

# The Case for Restoring Bull Trout in Glacier National Park... And a Framework to Do It



### THE LAST OF THE LAST... Trouble in Glacier's waters and what can be done



Glacier National Park is often touted as one of America's last great strongholds of native fish and wildlife, but that grand distinction is at risk today. After about 10,000 years of dominance, Glacier's greatest aquatic predator is vanishing from beneath the surface of the sparkling wilderness lakes that dominate the dramatic landscape on the western slopes of the Continental Divide. In just 30 years, the native bull trout populations of Glacier's wild westside lakes have plummeted to the point that fisheries biologists fear for their ultimate survival. Based upon recent park population trends and the experience gained in other places, the prospects for Glacier's bull trout are not good. As surely as the glaciers are receding, the park's bull trout may disappear from many of their historic waters in our lifetimes

if nothing is done to reverse the sharp downward trend.

Fortunately park managers are cooperating with other state, tribal and federal agencies, as well as private-sector partners to protect and restore the bull trout of Glacier National Park. Some of these steps were initiated when bull trout were listed as a threatened species under the U.S. Endangered Species Act in 1998. But progress has been slow and modest—at least compared to the magnitude and speed of the bull trout's decline.

In some cases, the decline has been ongoing since at least the 1960s, and accompanied by drops in the numbers of native westslope cutthroat and mountain whitefish. In others, it is a much more recent circumstance. Glacier's bull trout numbers are being literally eaten away by non-native lake trout in Kintla, Bowman, Harrison, Logging, and Lake McDonald.

On the surface, these lakes—and others in the park—appear as wild as ever. But underwater, Glacier is losing a vital and important piece of

This report represents an appeal to the collective wisdom and commitment of a new public-private partnership, including anglers, park advocates, fish biologists and federal land managers. It is intended to inform scientists, administrators and the public about the issues involved with bull trout, including what is being done and what is needed.

Through interagency collaboration and action plans that expand our understanding of the bull trout's decline, much can be done to preserve this species on the west side of Glacier Park.



Columbia Falls-based writer David Madison, in cooperation with Glacier National Park, the National Parks Conservation Association, the U.S. Fish and Wildlife Service and the University of Montana/National Park Service Rocky Mountain Cooperative Ecosystems Study Unit compiled this report.

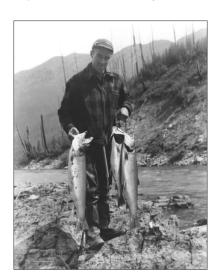
#### **SECTION I:**

### A personal history of bull trout in the Flathead Valley and Glacier Park

Fay Eklund laughs a lot, especially when retelling one of her many fish stories. There's the one about her fishing while pregnant with her first child. She threw an anchor overboard, not realizing the rope was wrapped around her leg. Next thing Eklund knew, she was bobbing in the water right where the Flathead River enters

Flathead Lake. This was a prime fishing spot at the time, where she and her husband Dallas would catch 15-pound bulls.

During the 1950s, '60s and '70s, Fay and her husband watched bull trout retreat from their favorite fishing spots on Flathead Lake and throughout the Flathead River system. "[Dallas] had his favorite places to go. And naturally, if there was nothing in that



area, he'd have to find a new place," recalls Fay. Over the decades, Fay and Dallas had to look further and further in search of bull trout. One old photo shows Dallas standing on the banks of the North Fork. The image is distinctly from another era. Instead of Gortex,



Dallas is wearing a classic red and black wool overcoat. And instead of pan-sized "cut-bow" hybrids, Dallas is holding three giant bull trout.

Today, bull trout remain in greatly reduced numbers in the Flathead system. There are a few big old bulls still out there, but it's not at all like it used to be.

Time and effort have gone toward helping the bull trout, but many residents of the Flathead have never even heard of the fish. "There are strangers in this community who don't know about bull trout," says Fay, adding that there are also people like her who remember how this species was once tightly woven into the fabric of the local community. It was often the topic of conversation at Flathead Outdoor Club meetings. It occupied the imagination of anglers for most of the last century and doubtless the imagination of many generations of Native American fishermen before that.

This once plentiful species fed Fay and Dallas and many others with a sense of connection to the real Montana. When it comes to the bull trout's decline, Fay says, "There's an awful lot of people who feel very sad, very bad that it was a native fish of Montana." "Was a native fish of Montana." "Fay can't help herself. She's already speaking in the past tense about bull trout

#### The Kingdom of the Bulls

Quartz Lake is the largest remaining natural bull trout lake in the upper Columbia River drainage that continues to host an entirely natural species assemblage of fish. Nowhere else in this vast river system—stretching from the Pacific Ocean to the Columbia headwaters in Glacier Park—is there another lake this large with a native fishery as wild as Quartz.

More than six miles by trail, the hike into Quartz is mostly boxed in

by dense forest. The views are limited and the mosquitoes can be unrelenting. Along the lake's shore, pine pollen concentrates in layers as thick as pancake batter. The water is enticingly clear.

A family of otters lives in a logjam at the foot of the lake, which is heavily populated by native westslope cutthroat. Fingerlings dart in and out of the shadows where the aquamarine water flows through a maze of driftwood and fallen logs.

Quartz Creek tumbles into Middle Quartz Lake and Lower Quartz Lake before emptying into the Flathead's North Fork. In the summer of 2004, on the cascading stretch of creek between Middle and Lower Quartz lakes, a National Park Service crew plans to build an artificial barrier. The barrier is meant to prevent the migration of lake trout up from Lower Quartz Lake, where the presence of lake trout was verified in 2003.

If lake trout do infiltrate Quartz Lake, many visitors will continue to come and go to this place without noticing. They'll be distracted by the sound of loons in the distance and by tracks on the trail: Is that a lynx, or a mountain lion print? Backpackers will wander through, calling out "Hey bear," in hopes of avoiding a grizzly encounter. Anglers will continue to fish for whatever's biting.

To future generations, Quartz Lake will still feel wild, even if there remain no bull trout swallowing cutthroat whole and growing fat under the logiam. But, the lake will be forever compromised and an important part of the Park's natural heritage will be lost.



### SECTION II: Problems for bull trout begin



Some early signs of the trouble to come for bull trout appeared on the front page of Kalispell's Daily Inter Lake in 1890. "As the years go by, our trout fishing has been gradually but surely deteriorating," reported one angler, who was apparently disappointed by a recent fishing trip to the Flathead River, where his party caught only "200 pounds of fine salmon trout." That was considered a bad day of fishing.

For decades, the fish was known as "salmon trout" or "Dolly Varden"—a name taken from a character in the Charles Dickens novel Barnaby Rudge. Dickens describes Ms. Varden as "the very pink and pattern of good looks." Appropriately, bull trout are handsome creatures, their pink and sometimes pale yellow spots set against shiny grayish-green skin.

Bull trout are also blessed with muscular bodies, which they show-cased every time they wound up on a hook. A newspaper story from 1898 reported lots of "fine catches" at the mouth of the Swan River, where the village of Bigfork sits today. The story lamented that the fish were "not of the largest size, running only from 8 to 12 pounds, but there is lots of 'go' in them."

In a Daily Inter Lake story from 1901, the paper reported, "no 8-ounce bamboo rod and light line will stop [a bull trout] with less than a quarter of a mile of line." These fish were fighters,

but in the years and decades to come, they would meet their match.

Fish biologists surmise that nonnative lake trout arrived in the Flathead with shipments of lake whitefish brought in by the U.S. Fish Commission. Both species were likely planted in Flathead Lake beginning around 1903, in an effort to create a commercial whitefish fishery similar to that of the Great Lakes.

So at the start of the 20<sup>th</sup> century—as lake trout numbers began to grow—and after 10,000 years of adaptation without competition, bull trout were gradually forced to compete for the top slot on the aquatic food chain. In this competition, the bull trout have several disadvantages. To begin with, lake trout produce more offspring and typically spawn every year. They also spawn in the lake where the young have fewer threats to face.

Bull trout, on the other hand, migrate as far as 150 miles upstream from Flathead Lake or other lakes of

The way it was: Just another day of bull trout fishing.

origin to spawn in their natal waters. Many of the streams on the west side of Glacier National Park provide bull trout spawning. The young rear for up to three years in their birth stream before migrating back to the associated lake. The journeys have many pitfalls for both young and adults, and due to

the harsh demand of making it to the spawning grounds, returning bull trout spawn only every other year, on average.

Today, some of the bull trout's best spawning streams accommodate only remnant populations of this treasured species. Bull trout require the coldest, highest quality water of any trout species. A high degree of connectivity between the spawning and rearing streams and the larger lakes and rivers downstream is critical to their survival. For these and other reasons, the ability of a stream to support spawning bull trout says a lot about the healthy condition of the habitat that supports other species, including humans.

Still, even as the once abundant waters of the Flathead Valley are becoming over-fished and over-developed, Glacier National Park is viewed as an important refuge for bull trout to thrive.

## SECTION III: How lake trout made the bull trout's problems even worse

It was during the 1980s that all the problems confronting the bull trout—over-fishing, poaching, degradation of habitat—were dwarfed by a new, more serious threat: a population boom in Flathead Lake's lake trout.

The origins of the lake trout boom can be traced to an ill-advised effort to boost the nonnative kokanee salmon sport fishery in Swan Lake, which sits upstream from Flathead Lake. Taking a cue from Canadian fishery managers, in the late 1960s and early 1970s Montana Fish, Wildlife and Parks introduced the opossum or *Mysis* shrimp to Swan Lake and several other lakes in the Flathead Valley with the hope that this new food source would lead to bigger kokanee and better kokanee fishing.

Unfortunately, the most notable result of this introduction did not take place in Swan Lake. Instead, the *Mysis* shrimp apparently washed downstream

to Flathead Lake. They were first detected in Flathead Lake in 1981, and by 1986 had exploded to densities of over 100 Mysis per square meter of lake surface area. This rich new food source fueled a dramatic boom in the lake trout and lake whitefish popula-

Within a few years, both kokanee and bull trout populations in Flathead Lake crashed as they fell prey to or were outcompeted by growing schools of ravenous lake trout. Shock waves were felt throughout the ecosystem, extending all the way to grizzly bears and bald eagles that had come to compete with anglers for the now diminished numbers of spawning kokanee

in McDonald Creek in Glacier National Park.

By 1992, redd count levels (the number of spawning nests for bull trout) in eight index streams in the North and Middle Forks of the Flathead River drainages declined, from an average of 391 in the 1980s to 120 in 1992. Clearly, there were fewer bull trout migrating up from Flathead Lake to traditional spawning grounds in or near Glacier National Park. It was the large lakes in Glacier National

Park that interested U.S. Fish and Wildlife Service biologist—and bull trout specialist—Wade Fredenberg when he set out to study bull trout in 2000. Fredenberg surmised from angler accounts that shock waves of the native fish collapse in Flathead Lake had ripple effects in other waters and the numbers of lake trout lurking in park waters might be on the rise.

He also knew that Glacier's large lakes contained self-sustaining populations of bull trout that did not migrate downstream. Instead, they spawned in

the glacially fed creeks pouring into the park's lakes. It was these populations of bull trout—each genetically unique from the others—that Fredenberg set out to study and ultimately protect.

Fredenberg's 2000 study was modeled after research by a pair of Canadian fisheries biologists, D.B. Donald and D.J. Alger, in 1993. They concluded that lacustrine—or lake—populations of bull trout usually cannot be maintained if lake trout are introduced.

Previous park surveys of bull trout populations, conducted in 1969 and 1977, provided Fredenberg with a body of research upon which to base his 2000 study. Fredenberg cap-

For example: In Kintla, Bowman, Logging and McDonald Lakes, the 1969 gill net survey captured a total of 250 bull trout and only 11 lake trout, a ratio of 23:1 in favor of the natives. In 2000, Fredenberg caught 138 lake trout and only 26 bull trout in the four lakes—a ratio of over five introduced lake trout for every native bull trout

> Fredenberg concluded that, "Conversion of unique native bull trout ecosystems to lake trout-dominated systems appears to be a common result once lake trout are established. It is clear from my study that even when habitat conditions remain relatively

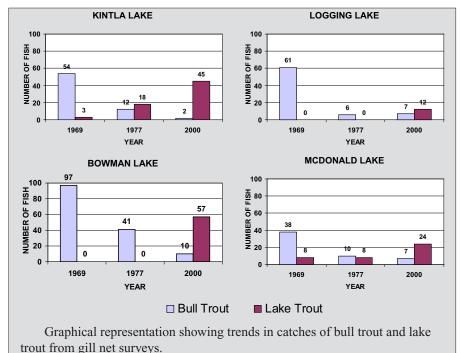
turned on Glacier's bull trout.

left in the four systems.

unaltered—as they are in park waters—the transition to a fish community where lake trout are the dominant fish-eating predator or piscivore may take place rapidly. On an ecological scale, 20 or 30 years is a very rapid transition, given that the native fish complexes presumably have been intact for thousands of years. Four of the five populations of bull trout that I studied are currently at high risk of extirpation, primarily due to invasion and establishment of lake trout."

Bill Michels, resource management

specialist at Glacier Park, says he doesn't want to see bull trout diminish any further. He knows that as the top aquatic predator, bull trout are an indicator species for the entire aquatic ecosystem. So as bull trout numbers drop, Michels isn't surprised to see those populations of westslope cutthroat and mountain whitefish slipping as well. This kind of cascading decline isn't supposed to happen in national parks. As Michels explains, "If you can't save native species in a national park, you're essentially throwing in the



tured 1,437 fish in the five study lakes (Kintla, Bowman, Quartz, Logging and McDonald) during 2000 with the dominant species being mountain whitefish, longnose suckers and lake trout. Lake trout were captured in four of the five waters surveyed, absent only in Quartz Lake.

Bull trout were found in all five lakes, but with the exception of Quartz, lake trout numbers were greatly exceeding those of bull trout. In the 20-30 years since the 1969 and 1977 studies, the tables were literally

#### Lessons from Yellowstone

Like Glacier, Yellowstone
National Park has seen its native fish
species threatened by the piscivorous
lake trout. "The perception of Yellowstone Lake as a secure refuge
for Yellowstone cutthroat changed
abruptly on July 30, 1994," reports
a Park Service study from 2000,
describing the day lake trout were
first documented in this jewel of the
Yellowstone ecosystem.

Just a month after the discovery, the U.S. Fish and Wildlife Service developed a plan of action "that had as its goal the elimination of lake trout from Yellowstone Lake."

This goal "was consistent with the National Park Service Policy that directs the removal of nonnative organisms from the park when feasible," according to a NPS report from 2000. And between 1994 and 2002, biologists removed 50,800 lake trout from Yellowstone Lake using "an aggressive gillnetting program."

The park's "population of cutthroat trout is highly valued ecologically, economically and socially," asserts a Yellowstone press release. "Grizzly bears, otters, eagles, white pelicans, and osprey are just a few of the species that will lose an important food source if the Yellowstone Lake cutthroat trout population is diminished."

In addition to gillnetting, Yellowstone has also urged anglers to assist in efforts to protect the park's native cutthroat. Lake trout fishermen are asked to fish in specific places where biologists believe population control is needed most.

"There is no creel limit for lake trout on Yellowstone Lake," Park Superintendent Suzanne Lewis told anglers in 2002. "The more removed, the better." Yellowstone officials believe that without an aggressive lake trout removal effort, "cutthroat trout may be reduced by 70 percent in 100 years. A single lake trout can consume 50 or more cutthroat trout each year."

#### **SECTION IV:**

The far-reaching importance of Glacier's lakes







towel on native species."

There are only 100 or so lakes and reservoirs in the entire Columbia River Basin with bull trout populations. Only half of those are natural lakes, unregulated by dams. Of the 50 or so natural lakes without dams, about two-thirds are in Montana. And of the natural lakes with bull trout that are in Montana, nearly half (15 lakes) are in the Flathead River drainage of Glacier National Park (see table).

In fact, Quartz, and Upper Kintla Lakes in Glacier National Park, along with Big Salmon Lake in the adjacent Bob Marshall Wilderness, are the three largest bull trout lakes in the entire Columbia River Basin that have not been compromised by the introduction of nonnative fish species.

"It can be logically argued that these three lakes represent the last best hope to maintain bull trout function in a completely natural environment," says the Fish and Wildlife Service's Fredenberg. "Two other large and pristine lakes, Logging and Harrison, have recently been compromised by lake trout invasion. This underscores the significance of Quartz, Upper Kintla, and Big Salmon lakes—essentially the last 5% of the Last Best Place for bull trout."



A lake trout caught in Lake McDonald

#### How do lake trout and bull trout share the same habitat?

The Montana Cooperative Fishery Research Unit, a USGS entity headquartered at Montana State University in Bozeman, is currently conducting research on the way the habitat in Lake McDonald is being used by lake trout. The study employs the innovative use of sonar tags that allow researchers to locate fish implanted with the devices and track their movements and depth distribution. "This is so we can study their habitat use both in space and time, to see what these fish are doing," says graduate student Andy Dux, explaining that the study seeks clues about the interaction between lake trout and bull trout. The sonar devices will allow them to see when and where the two species overlap as they go about their lives in Lake McDonald.





Fish biologists know that lake trout tend to displace bull trout from their native habitat, but Dux says, "We don't really know the mechanism. It's yet to be seen exactly what the mechanism is." Another study is slated to go, beginning in 2004. With grant money from the U.S. Fish and Wildlife Service, the Montana Cooperative Fishery Research Unit is going to explore the intricacies of bull trout life history in all 15 lakes on the west side of the Park.

"The more we know about bull trout demographics (population abundance, distribution, growth and change, and life history parameters) in compromised waters such as McDonald, Bowman, and Kintla Lakes and can contrast them with those that are found in systems that are thought to

still be functioning in their natural state such as Upper Kintla and Quartz Lakes, the better we can devise strategies to cope with this invasive species problem in the future," says Fredenberg. The findings of these studies and additional work by the Park Service may help point the way to a management plan that protects the remaining bull trout in Glacier Park.

Park ecologist Leo Marnell says fish managers need to know all they

can about the bull trout-lake trout interaction, acknowledging that lake trout will always have some presence in Glacier. "There's just no way we can get rid of them," says Marnell. Asked how much time bull trout have left on the westside of the park if lake trout numbers continue to rise, Marnell replies, "I don't know. I don't think anybody knows."



#### **SECTION V**: A Framework for Preserving Bull Trout in Glacier -What you can do to help!

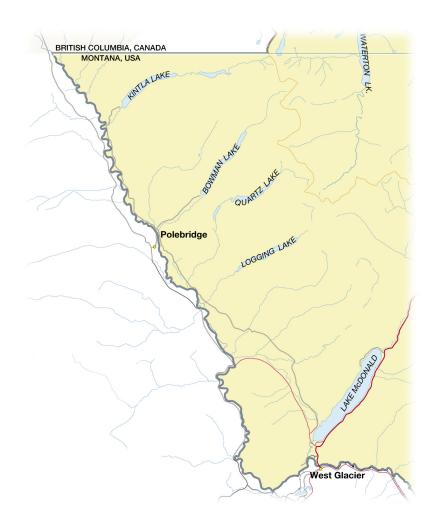
The significance of the declining presence of native bull trout has repercussions that reverberate through both the aquatic environment and the human community. The following capsules provide a framework for maintaining, restoring and preserving bull trout populations inside Glacier National Park.

#### **Issue 1. The Bull Trout Legacy:**

As the memories of the bull trout's reign begin to fade with the passing of each member of the Flathead Vallev's older generation, this region is in danger of losing a valuable part of our natural history and cultural heritage.

**Strategy:** In the near term, we will build on the archives of anecdotal data, historical artifacts, and photographs with other cultural resources such as interviews with retired employees and anglers to document the history of bull trout, incorporating more data and materials from GNP. Over the longer term, we will use the archives to produce colorful outreach materials for use by rangers and interpretive staff and create an interpretive site on the shore of Lake McDonald—along the highly traveled Going-to-the-Sun Road—that provides details about the park's native fishery and describes the challenges facing the bull trout.





#### Issue 2. Habitat and life history research in Glacier Park:

The current telemetry study on Lake McDonald and newly-funded initiative on the 15 west-side lakes in the Park will help provide a baseline dataset on bull trout habitat and the fishes interaction with other species, particularly lake trout in Glacier Park. These studies should provide a "fin in the door" for bull trout, attracting additional funding for expanded field studies.

Strategy: We will continue collaborative efforts to build partnerships and strengthen the coalition to support the recovery of bull trout in GNP waters. Now more than ever, protecting the native waters and spawning grounds of the bull trout in Glacier Park is paramount. Over the long term we will use the collective research results to

develop a long-term management strategy for the recovery of bull trout and native westslope cutthroat trout in westside Park lakes. Developing the financial and political support to make the management strategy happen on the ground is critical to our success.

#### Issue 3. The lake trout threat:

With the body of research already accumulated and the ongoing Lake McDonald study being conducted in Glacier Park, the push to address the lake trout threat is gaining momentum. A current hypothesis is that functional replacement of bull trout by lake trout is a straightforward one-to-one tradeoff that can occur in only a few decades. That hypothesis must be proven, as we remain mindful that native fish in the Flathead Basin have suffered in the past from unforeseen consequences of well-intentioned ini-

#### A last refuge: the lakes of Glacier Park



Lake	Size (Ac.)	Roaded	<b>BLT Status</b>	BLT Trend	Nonnatives
McDonald	6,823	Yes	Rare	Uncertain	Lake trout, rainbows, lake whitefish
Bowman	1,705	Yes	Uncommon	Declining	Lake trout
Kintla	1,698	Yes	Rare	Declining	Lake trout
Logging	1,097	No	Common	Declining	Lake trout
Quartz	900	No	Abundant	Stable	None
Upper Kintla	472	No	Abundant	Presumed stable	None
Harrison	410	No	Common	Uncertain	Lake trout, brookies, rainbows, kokanee
Trout	213	No	Common	Presumed stable	Rainbows, Yellowstone cutthroat
Lower Quartz	166	No	Common	Uncertain	Lake trout
Arrow	57	No	Common	Presumed Stable	Rainbows, Yellowstone cutthroat
Cerulean	49	No	Common	Presumed stable	None
Isabel	42	No	Abundant	Presumed stable	None
Lincoln	40	No	Common	Presumed stable	None
Middle Quartz	36	No	Common	Presumed stable	None
Akokala	23	No	Common	Presumed stable	None

tiatives. Management actions in the future should focus on safeguarding existing bull trout strongholds while conducting further research and experimental lake trout control efforts in lakes where bull trout are in decline.

Strategy: Coordinate efforts and priorities of Glacier National Park, the U.S. Fish and Wildlife Service, Montana Fish, Wildlife and Parks, and the Confederated Salish and Kootenai Tribes to manage the Flathead system as an interconnected unit, not a set of unrelated parts. Within the boundaries of Glacier National Park itself, ongoing scientific assessments and new initiatives will recognize different levels of urgency for protection and recovery efforts on a lake-by-lake basis. The following preliminary analysis provides a relative ranking, in terms of urgency of protecting bull trout and other native fish in lakes in Glacier National Park, based on our current understanding. This assessment is just beginning in earnest and much work

remains to be done.

#### Highest Priority Intact Lakes At Risk: Quartz, Cerulean and Middle Quartz.

These lakes are believed occupied by only native fish. The management prescription for the Quartz Lake chain will include the rapid development of a barrier (planned for 2004), followed by aggressive monitoring (redd counts and evaluation every few years) and continued protection. The Quartz Lake complex is the crown jewel of the entire Columbia River Basin for native fish.

### Second Priority Intact Lakes in Need of Evaluation: Trout, Arrow, Lincoln and Akokala.

Recent surveys indicate these lakes have not been invaded by lake trout, although non-native Yellowstone cutthroats and rainbows can be found in Camas Creek, which includes Trout and Arrow lakes. The management prescription for these lakes will focus first on evaluating the potential for lake trout invasion. Are there absolute barriers to lake trout migration? This evaluation will be accompanied by an examination of bull trout population size, genetic surveys, determination of spawning and rearing areas, and an assessment of the overall risks to bull trout in these waters. Essentially, the objective is to learn enough to ultimately place these lakes in a category where appropriate long-term management and protection strategies can be put in place.

## Third Priority Invaded Lakes in Decline: McDonald, Bowman, Kintla, Logging, Harrison and Lower Quartz.

These lakes are in various stages of colonization by lake trout, with possible extirpation of bull trout imminent. Aided by the ongoing Lake McDonald study and other similar



research we stand to learn a tremendous amount about the effects of lake trout invasion on these waters. We will continue to evaluate spatial and temporal overlap of the two species and rapidly identify and begin monitoring of existing spawning and rearing areas for bull trout.

The ongoing Lake McDonald study is an important first step in this research process, and beginning in 2004 will be extended to the park's other westside lakes in this category. Through these research efforts opportunities will be identified for fortifying bull trout strongholds. As research improves our understanding of these complex aquatic ecosystems, managers may consider options to actively control lake trout populations. Other future options may include protection of genetic reserves, possible population supplementation from appropriate captive stocks, or other methods to artificially boost bull trout numbers while the balance with lake trout is favorably restored.

#### **Fourth Priority Invasion-Resistant: Upper Kintla** and Isabel (may also include many of the lakes currently in **Second Priority category upon** further examination).

These lakes are presumably immune from natural invasion due to natural barriers. Focus will be placed on passive monitoring and protection. to ensure that we understand the existing status and have adequate indicators to detect signs of trouble. Also, regular follow-up is needed to reinforce these isolating

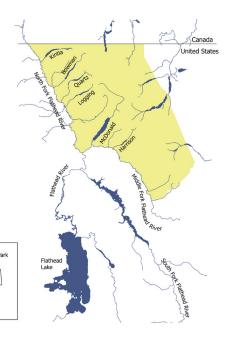
## mechanisms.

#### **CONCLUSION:**

As history has shown all too well, once diminished, the recovery of native fish species is a monumental challenge. The sooner we begin, the better chance this partnership will have to succeed. There is no better place to start than in the relatively pristine habitat of Glacier National Park, where emphasis on the preservation of bull trout is not just a good idea, it's part of the National Park Service's core mission. It's an important mission, one that will have positive repercussions throughout the aquatic ecosystem and human communities of the entire northwestern United States.

#### **How Can You Help?**

Help us spread the word in your community! Educate yourself and others about the issues and impacts from the growing menace of nonnative aquatic species. Insist on the full recovery of Glacier's native fishes in the waters where they originated. If you're an angler, cooperate with the park regulations as they are largely designed to protect native species. If you come in contact with survey crews, nets, or equipment respect their purpose, but feel free to ask questions and involve yourself in their activities.



If you wish to join the partnership by volunteering your time, financial, or educational support please contact Steve Thompson at the National Parks Conservation Association. Steve is also the contact to help develop public presentation materials and/or to speak to groups about our bull trout legacy. Contact Deirdre Shaw in Glacier National Park if you have photos, anecdotes, or artifacts that relate to Glacier's bull trout heritage. We welcome your support!



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